

## CLAIMS

- 1  
2 1. An alarm clock IC adapted for use in a personal computer (PC), comprising alarm  
3 clock logic circuitry adapted to receive a signal indicative of the power status of said PC  
4 and further adapted to generate an alarm clock event at a preselected time.
- 5 2. An alarm clock IC as claimed in claim 1, wherein said alarm clock event  
6 comprises the generation of a control signal to control an AM/FM radio module  
7 associated with said PC.
- 8 3. An alarm clock IC as claimed in claim 1, wherein said alarm clock event  
9 comprises the generation of a control signal to control a TV module associated with said  
10 PC.
- 11 4. An alarm clock IC as claimed in claim 1, wherein said alarm clock event  
12 comprises the generation of a control signal to control an audio circuit associated with  
13 said PC.
- 14 5. An alarm clock IC as claimed in claim 1, further comprising power control  
15 circuitry and wherein said alarm clock event comprises the generation of a control signal  
16 to control said power control circuitry to turn ON said PC system based upon said signal  
17 indicative of the power status of said PC.
- 18 6. An alarm clock IC as claimed in claim 1, further comprising power control  
19 circuitry and wherein said alarm clock event comprises the generation of a control signal  
20 to control said power control circuitry to turn OFF said PC system based upon said signal  
21 indicative of the power status of said PC.
- 22 7. An alarm clock IC as claimed in claim 1, wherein said alarm clock event  
23 comprises the generation of a control signal to launch an application program associated

1 with said PC, said application program adapted to control one or more modules  
2 associated with said PC.

3 8. An alarm clock IC as claimed in claim 1, further comprising a user input  
4 interface adapted to permit a user to control the functionality of said alarm clock logic  
5 circuitry.

6 9. An alarm clock IC as claimed in claim 1, further comprising a display module  
7 interface adapted to control a display and adapted to display status information related to  
8 said alarm clock logic circuitry.

9 10. An alarm clock IC as claimed in claim 1, further comprising a host interface  
10 adapted to interface said alarm clock logic circuitry to a bus associated with said PC.

11 11. An alarm clock PC system, comprising:  
12 a PC adapted to generate a signal indicative of the power status of said PC; and  
13 an alarm clock IC adapted to receive said signal indicative of the power status of  
14 said PC and further adapted to generate an alarm clock event at a preselected time.

15 12. An alarm clock PC system as claimed in claim 11, wherein said alarm clock event  
16 comprises the generation of a control signal to control an AM/FM radio module  
17 associated with said PC.

18 13. An alarm clock PC system as claimed in claim 11, wherein said alarm clock event  
19 comprises the generation of a control signal to control a TV module associated with said  
20 PC.

21 14. An alarm clock PC system as claimed in claim 11, wherein said alarm clock event  
22 comprises the generation of a control signal to control an audio circuit associated with  
23 said PC.

- 1 15. An alarm clock PC system as claimed in claim 11, said alarm clock IC further  
2 comprising power control circuitry and wherein said alarm clock event comprises the  
3 generation of a control signal to control said power control circuitry to turn ON said PC  
4 system based upon said signal indicative of the power status of said PC.
- 5 16. An alarm clock PC system as claimed in claim 11, said alarm clock IC further  
6 comprising power control circuitry and wherein said alarm clock event comprises the  
7 generation of a control signal to control said power control circuitry to turn OFF said PC  
8 system based upon said signal indicative of the power status of said PC.
- 9 17. An alarm clock PC system as claimed in claim 11, wherein said alarm clock event  
10 comprises the generation of a control signal to launch an application program associated  
11 with said PC, said application program adapted to control one or more modules  
12 associated with said PC.
- 13 18. An alarm clock PC system as claimed in claim 11, said alarm clock IC further  
14 comprising a user input interface adapted to permit a user to control the functionality of  
15 said alarm clock logic circuitry.
- 16 19. An alarm clock PC system as claimed in claim 11, said alarm clock IC further  
17 comprising a display module interface adapted to control a display and adapted to display  
18 status information related to said alarm clock logic circuitry..
- 19 20. An alarm clock PC system as claimed in claim 11, said alarm clock IC further  
20 comprising a host interface adapted to interface said alarm clock logic circuitry to a bus  
21 associated with said PC.

- 1    21.    A method of operating a PC as an alarm clock, said method comprising the steps  
2    of monitoring the power status of said PC and generating an alarm clock event at a  
3    preselected time.
- 4    22.    A method as claimed in claim 21, further comprising the step of, in response to  
5    said alarm clock event, controlling an AM/FM radio module associated with said PC.
- 6    23.    A method as claimed in claim 21, further comprising the step of, in response to  
7    said alarm clock event, controlling a TV module associated with said PC.
- 8    24.    A method as claimed in claim 21, further comprising the step of, in response to  
9    said alarm clock event, controlling an audio circuit associated with said PC.
- 10   25.    A method as claimed in claim 21, further comprising the step of, in response to  
11   said alarm clock event, generating a control signal to turn ON said PC system based upon  
12   said power status of said PC.
- 13   26.    A method as claimed in claim 21, further comprising the step of, in response to  
14   said alarm clock event, generating a control signal to turn OFF said PC system based  
15   upon said power status of said PC.
- 16   27.    A method as claimed in claim 21, further comprising the step of, in response to  
17   said alarm clock event, launching an application program associated with said PC, said  
18   application program adapted to control one or more modules associated with said PC.
- 19   28.    A method as claimed in claim 21, further comprising the step of displaying status  
20   information related to said alarm clock event.